



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/403,338	10/19/1999	SEINOSUKE HORIKI	2710/60471	7137
7590	06/01/2004		EXAMINER	
COOPER & DUNHAM 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			KRUER, KEVIN R	
			ART UNIT	PAPER NUMBER
			1773	

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	09/403,338	Applicant(s)	HORIKI ET AL.
Examiner	Kevin R Kruer	Art Unit	1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 29 March 2004.  
2a) This action is FINAL.      2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1,3,5,6,8,10 and 12 is/are pending in the application.  
4a) Of the above claim(s) 10 and 12 is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1,3 and 5-8 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
    Paper No(s)/Mail Date \_\_\_\_\_  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

***DETAILED ACTION***

***Election/Restrictions***

1. Claims 10 and 12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 02/12/2002.
2. This application contains claims 10 and 12 drawn to an invention nonelected with traverse in Paper No. 02/12/2002. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Oath/Declaration***

3. Receipt of the Oath/declaration filed March 29, 2004 is acknowledged.  
The newly executed declaration was filed in response to the Office Action mailed September 24, 2003 in which it was noted that Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath or declaration does not acknowledge the filing of the PCT application.

***Specification***

4. The abstract filed August 14, 2002 is acceptable. The objection to the abstract in the Office Action mailed September 24, 2003 is rendered moot by the abstract filed August 14, 2002.

***Claim Rejections - 35 USC § 112***

5. The rejection of claims 1, 3, and 5-8 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by amendment.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP06270329 (herein referred to as Yuka'329), JP07195870 (herein referred to as Yuka'870, JP08121092 (herein referred to as Yuka'192), or JP05204609 (herein referred to as Yuka'609), in view of Taylor (US 4,292,105) for reasons of record.

8. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP06270329 (herein referred to as Yuka'329), JP07195870 (herein referred to as Yuka'870, JP08121092 (herein referred to as Yuka'192), or JP05204609 (herein referred to as Yuka'609), in view of Benzinger (US 3,617,613) for reasons of record.

9. Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP06270329 (herein referred to as Yuka'329), JP07195870 (herein referred to as Yuka'870, JP08121092 (herein referred to as Yuka'192), or JP05204609 (herein referred to as Yuka'609), in view of Casadevall (US 3,960,626) for reasons of record.

10. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 3,922,459) in view of JP06270329 (herein referred to as Yuka'329),

JP07195870 (herein referred to as Yuka'870), JP08121092 (herein referred to as Yuka'192), or JP05204609 (herein referred to as Yuka'609) for reasons of record.

11. Claims 1, 3, and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke (US 3,619,342) in view of JP06270329 (herein referred to as Yuka'329), JP07195870 (herein referred to as Yuka'870), JP08121092 (herein referred to as Yuka'192), or JP05204609 (herein referred to as Yuka'609) for reasons of record.

### ***Response to Arguments***

Applicant's arguments filed March 29, 2004 have been fully considered but they are not persuasive.

Applicant argues that there is no teaching of the concept that the phenolic resin is at least partially sulfomethylated and/or sulfimethylated at the time when the phenolic resin is at the B-stage to enhance moldability, storage life, and heat resistance. While the examiner concedes that no single reference teaches the advantage of B-stage curing a phenolic resin that is at least partially sulfomethylated and/or sulfimethylated, the examiner maintains the position that the combination of references as applied above renders the claimed material obvious for the reasons stated in the Office Action mailed September 24, 2003. Since Applicant provides no argument as to why the combination of art fails to render obvious the claimed invention, the rejection is maintained.

Applicant argues that the combination of references fails to recognize the synergistic effect that results from B-stage curing a phenolic resin that is at least partially sulfomethylated and/or sulfimethylated. Specifically, applicant argues that the test submitted with the amendment mailed September 5, 2003 demonstrates that the

Art Unit: 1773

claimed material exhibits improved moldability, storage life, and heat resistance in comparison to a phenolic resin that is not sulfomethylated and/or sulfimethylated. However, the examiner maintains the position that the showing is not unexpected. Specifically the Yuka references teach that the sulfomethylation or sulfimethylation of a phenolic resin improves the resins moldability, storage life, and heat resistance. Thus, the data in the specification and Applicant's response is not considered unexpected since the Yuka references teach that phenolic resins have a longer storage life.

Applicant further argues that advancing the resin to the B-stage is important. Specifically, resins in the A-stage were difficult to pull off a roll after lengthy storage and are sticky. However, one of ordinary skill in the art would expect a polymer in the A-stage to exhibit such properties. Taylor explicitly teaches that the polymerization of the thermosetting polymer should be advanced to the B-stage, because the impregnated material can be stored for a reasonable length of time in that state (col 1, lines 18+).

Thus, Applicant's arguments are not persuasive.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1773

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on 571-272-1516. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin R. Kruer  
Patent Examiner-Art Unit 1773



Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700